TRANSMITTAL OF INFORMATION DISCLO		Docket No. UDC-20101
In Re Application of: Michael Stuart Weaver et al.		
Serial No. 10/043,849 TRADE 1/10/02	Examiner	Group Art Unit
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Title: OLEDS HAVING INCREASED EXTERNAL ELE	CTROLUMINESCENCE QU	ANTUM
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37	CFR 1.97(b)	
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37	CFR 1.97(c)	
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TRANSMITTAL OF INFORM	AATION DISCLO FR 1.97(b) or 1.97	17	Docket No. UDC-20101	
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Serial No.	iling Date	Examiner	Group Art Unit	
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In Re Application of: Serial No. 10/043,849

Michael Stuart Weaver et al. OLEDS HAVING INCREASED EXTERNAL ELECTROLUMINESCENCE QUANTUM EFFICIENCIES

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Docket Number (Optional) Application Number BEMENTAL UDC-20101 10/043,849 ONFORMATION DISCLOSURE CITATION Applicant(s) Michael Stuart Weaver et al. Lise several sheets if necessary) Group Art Unit Filing Date 2 4 2003 1/10/02 2879 U.S. PATENT DOCUMENTS EXAMINER FILING DATE SUBCLASS CLASS DOCUMENT NUMBER DATE NAME INITIAL IF APPROPRIATE 506 5,371,434 12/6/94 Rawlings 313 2. 5,618,626 4/8/97 Nagashima et al. 428 429 3. 5,814,416 9/29/98 Dodabalapur et al. 428 690 4. 11/10/98 Bulovic et al. 313 506 5,834,893 5. 8/10/99 313 509 5,936,347 Isaka et al. 6. 385 131 6,125,226 9/26/00 Forrest et al. FOREIGN PATENT DOCUMENTS \overline{C} Translatio REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES **PCT** WO 01/33598 5/10/2001 HO1J 1 62 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Paul C.K. Kwok et al., "Designing an External Efficient of Over 30% for Light Emitting Diode," IEEE Lasers and Electro-Optics Society 1998 Annual Meeting, Conference Proceedings, Vol. 1, pp. 187-188. 1. Takashi Yamasaki et al., "Organic Light Emitting Devices with a Periodic Dielectric Structure as a Scattering Media," IEEE Lasers and Electro-Optics Society 1998 Annual Meeting, Conference Proceedings, Vol. 1, pp. 189-190. 2. EXAMINER DATE CONSIDERED EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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3.	Takashi Yamasaki et al., "Organic Light-Emittin Medium," Applied Physics Letters, Vol. 76, no. 10,	g Device with an Ordered Monolaye , March 2000, pp. 1243-1245.	er of Silica Microspheres as a Scattering
	V. Bulovic et al., "Weak Microcavity Effects in O 1998, pp. 3730-3740.	rganic Light-Emitting Devices," <i>Ph</i>	ysical Review B, Vol. 58, no. 7, Aug. 15,
4.			
5.	H. Yokogawa et al., "New Transparent Substrate Society Symposia Proceedings, Vol., 660, pp. JJ51	19.1-19.6.	
6.	Dan Daly et al., "Little Lenses, Major Markets: M Communications, Display, and Imaging Applications	Microlens Arrays Provide Optical Vion," <i>Photonics Spectra</i> , July 2001, p	ersatility in a Miniature Package for pp. 120-122.
7.	A. N. Safonov et al., "Modification of Polymer Lippp. 145-148.	ght Emission by Lateral Microstruc	ture," Synthetic Metals, Vol. 116, 2001,
	Benjamin J. Matterson et al., "Increased Efficient Diode," Advanced Materials, Vol. 13, no. 2, Jan. 1	cy and Controlled Light Output fro	m a Microstructured Light-Emitting
8.	Diode, Aavancea materials, vol. 13, no. 2, Jan. 1	16, 2001, pp. 123-127.	
9.	G. Gu et al., "High-External-Quantum-Efficiency 1997, pp. 396-398.	y Organic Light-Emitting Devices,"	Optics Letters, Vol. 22, no. 6, March 15,
	C. F. Madigan et al., "Improvement of Output Co	ounling Efficiency of Organic Light	-Emitting Diodes by Backside Substrate
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SUPPLEMENTAL TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT Docket No. (Under 37 CFR 1.97(b) or 1.97(c)) UDC-20101 In Re Application Michael Staart Weaver et al. SEP 2 4 2003 Serial No iling Date Examiner Group Art Unit 10/043,849 1/10/02 Unassigned 2879 Title: OLEDS HAVING INCREASED EXTERNAL ELECTROLUMINESCENCE QUANTUM **EFFICIENCIES** Address to: **Assistant Commissioner for Patents** Washington, D.C. 20231 37 CFR 1.97(b) 1. Mark The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114. 37 CFR 1.97(c) The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of: ☐ the statement specified in 37 CFR 1.97(e); CHWOLDGY CENTER 2800 OR ☐ the fee set forth in 37 CFR 1.17(p).

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))			Docket No. UDC-20101
In Re Application: 7	Michael Stuart Weaver et al.		
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